

Instrumentation and Controls Division (RI)

Responsible for planning, conducting and directing basic and applied research on advanced instrumentation and controls technologies for aerospace propulsion and power applications. The advanced research in harsh environment sensors, high temperature high power electronics, micro/nano electromechanical systems, high data rate optical instrumentation, nondestructive evaluation methods, mobile photonic devices, active and intelligent controls, and health monitoring, diagnostic and management will enable self-feeling, self-thinking, self-reconfiguring and self-healing Aerospace Propulsion Systems. These research areas address Agency challenges to deliver aerospace systems with reduced size and weight, and increased functionality and intelligence for future NASA missions in advanced aeronautics, economical space transportation and pioneering space exploration.

